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REMARKS

The Office Action of May 1, 2002 has been reviewed. In response to the specification objections and claim rejections on the basis of prior art, the following arguments are submitted in support of patentability.

The Examiner objected to the specification. The specification has been amended in accordance with the Examiner's suggestions.

The Examiner rejected claims 1 - 20 under § 103(a) as being unpatentable over U.S. Pat. No. 6,225,731 to Auyung ("Auyung") in view of U.S. Pat. No. 5,017,839 to Arlt et al. Auyung was published on May 1, 2001 and therefore only qualifies as prior art under 35 U.S.C. § 102(e). The subject application, Serial No. 09/603,025 was filed June 26, 2000. Thus, 35 U.S.C. § 103(c) applies (i.e., this application was filed after November 29, 1999). The subject application and U.S. Pat. No. 6,225,731 were, at the time the invention of Serial No. 09/603,025 was made, owned by General Electric Company, Schenectady, NY. Therefore, under 35 U.S.C. § 103(c), Auyung, which qualifies as prior art only under § 102(e), shall not preclude patentability of the subject invention under § 103(a). Accordingly, the rejections are traversed, should be withdrawn, and the claims are in condition for allowance.

CONCLUSION

The applicant respectfully submits that the rejections set forth by the Examiner in the Office Action dated May 1, 2002 have been overcome. All formal and informal matters having been addressed, claims 1 to 20 are in condition for allowance. Withdrawal of all rejections and early notification of allowability are earnestly solicited. Should any issues remain, the Examiner is encouraged to contact the undersigned to resolve any such issues.

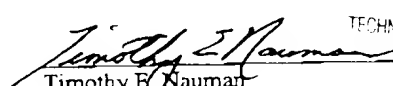
Respectfully submitted,

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In re Application of Laurence Bigio, et al.
For: IR-COATED HALOGEN LAMP USING REFLECTIVE END COATS
Serial No.: 09/603,025
Filed: June 26, 2000

Exhibit A

In developing the invention, it was determined that IR radiation escapes the envelope 102 even when it is covered by the IR reflective coating 118. In particular, the coating is less effective at acute angles measuring less than approximately thirty degrees (30°) from the major axis A of the ellipsoidal portion of the envelope 102 and at obtuse angles measuring approximately one hundred fifty (150°) from the major axis. The totally reflecting coating reflects the IR radiation (as well as the visible radiation) that is escaping at these angles towards the filament. By preferentially reflecting this IR radiation (and also the visible radiation) towards the filament [102] 104 that would otherwise pass through a lamp envelope having only an IR film, the efficacy of the light source 100 is improved. In the first embodiment as shown in FIGURE 1 the totally reflecting coating is disposed on both ends of the envelope subtending an angle from approximately twenty two (22°) to forty five (45°) from the major axis (or as measured to the opposite end as an obtuse angle from approximately one hundred thirty five degrees (135°) to one hundred fifty eight degrees (158°)) of the ellipsoidal portion of the envelope 102. In the second embodiment of FIGURE 2, the totally reflecting coating 120 is disposed on both ends of the ellipsoidal portion of the envelope (from approximately twenty two degrees (22°) to forty five (45°)), as well as the tubular portions of the envelope. By preferentially reflecting this IR radiation towards the filament 102, the efficacy of the light source 100 is improved.